

## Identification of specimen labeling errors in pathology specimens received from different wards of the hospital: A patient safety approach

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### ABSTRACT

**Background and Aim:** Nowadays, patient safety culture is recognized as an important issue in providing high quality services for the patients around the world. Unsafe care and services can lead to mortality, disability, prolonged hospitalization and increased costs of treatment. Therefore, the present study aimed to identify the errors associated with the labels of pathology samples in Qazvin hospitals.

**Materials and Methods:** This descriptive-analytic study was performed on the basis of a census sampling and included samples obtained from the operating rooms of five educational hospitals in Qazvin University of Medical Sciences in 2018. A standard checklist was used to collect information. Our professors and pathologists determined validity and reliability of the checklist by Cronbach's alpha of 0.89. Using SPSS 21 the results were analyzed by statistical indices.

**Results:** Among 1164 biopsy samples, 6425 errors were detected. The highest error rates were related to lack of registration of the patient's age (564 cases; 48.4%), lack of registration of the name of the of the patients' fathers (562 cases; 48.2%), and lack of recording the number of biopsies (558; 47.9%) and the lowest rates of errors included empty container (10 cases; 0.86%), lack of recording the number of specimens (14 cases; 1.2%) and lack of using appropriate fixative (16; 1.37 %) respectively.

**Conclusion:** Regarding the frequency of labeling errors in the pre-analytical phase in the pathology ward, use of bar code imprinted in the sample containers, lack of using paper applications, use of radio frequency chip technology, use of a re-checking system and improvement of communication in the operating rooms can result in reducing these errors.

**Keywords:** Patient safety, Labeling errors, Pathology specimens

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